

REMARKS

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Respectfully submitted,

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MARKED-UP VERSION SHOWING CHANGES MADE

IN THE CLAIMS:

Claims 1-14 have been amended in the following manner:

- 1 1. (Amended) [Method] A method for the elimination of spurious signal
2 components (SS) in an input signal (ES), said method consisting of
3 - the characterization, in a signal analysis phase (I), of signal components of the
4 spurious signal components (SS) and of [the] an information signal (NS) contained in the
5 input signal (ES), and
6 - the determination or generation, in a signal processing phase (II), of the
7 information signal (NS) or an estimated information signal (NS') on the basis of the
8 characterization obtained in the signal analysis phase (I),
9 said characterization of the signal components (SS, NS) being performed under
10 utilization at least of auditory-based features (M₁ to M_j).

- 1 2. (Amended) [Method] The method as in claim 1, [whereby one or several]
2 wherein at least one of the following auditory features (M₁ to M_j) are used for the
3 characterization of the signal components (NS, SS): [Loudness] loudness, spectral
4 profile, harmonic structure, common build-up and decay times, coherent amplitude and
5 frequency modulation, coherent phases, interaural runtime and level differences.

- 1 3. (Amended) [Method] The method as in claim 1 [or 2, whereby], wherein the
2 auditory features (M₁ to M_j) are determined in different frequency bands.

1 4. (Amended) [Method] The method as in [one of the claims 1 to 3, whereby]
2 claim 1, wherein the characterization of the signal components (SS, NS) is performed by
3 evaluating the features (M₁ to M_j) determined in the signal analysis phase (I), employing
4 [the] a primitive-grouping method.

1 5. (Amended) [Method] The method as in [one of the claims 1 to 3, whereby]
2 claim 1, wherein the characterization of the signal components (SS, NS) is performed by
3 evaluating the features (M₁ to M_j) determined in the signal analysis phase (I), employing
4 [the] a scheme-based grouping technique.

1 6. (Amended) [Method] The method as in claim 5, [whereby] wherein a
2 hypothesis is established or specified on the nature of the signal component (SS, NS) and
3 is taken into account in the grouping of the identified features (M₁ to M_j).

1 7. (Amended) [Method] The method as in claim 5 or 6, [whereby,] wherein for
2 the characterization of the signal components (NS, SS), at least the auditory features [and,
3 as applicable, other features] (M₁ to M_j) are grouped along the principles of [the] a gestalt
4 theory.

1 8. (Amended) [Method] The method as in [one of the claims 1 to 7, whereby]
2 claim 1, wherein the signal components identified as spurious noise components (SS) are
3 suppressed and/or the signal components identified as information signals (NS) or
4 estimated information signals (NS') are amplified.

1 9. (Amended) [Method] The method as in [one of the claims 1 to 8, whereby]
2 claim 1, wherein the information signal (NS) or an estimated information signal (NS')
3 is synthesized in the signal processing phase (II) on the basis of the features (M₁ to M_j)
4 detected in the signal analysis phase (I).

1 10. (Amended) [Method] The method as in [one of the claims 1 to 7, whereby,]
2 claim 1, wherein with the aid of an analysis of the harmonic structure in the signal
3 analysis phase (I), different base frequencies of the signal component of the information
4 signal (NS) or of the estimated information signal (NS') are extracted and, with the aid
5 especially of a loudness or LPC analysis, spectral levels of harmonics of these signal
6 components are defined, and on the basis of the spectral levels and the harmonics an
7 information signal for tonal speech components is synthesized.

1 11. (Amended) [Method] The method as in [one of the claims 1 to 7, whereby,]
2 claim 1, wherein with the aid of an analysis of the harmonic structure in the signal
3 analysis phase (I), nontonal signal components of the information signal (NS) or of the
4 estimated information signal (NS') are extracted and, with the aid especially of a
5 loudness or LPC analysis, spectral levels of these signal components are defined, and
6 with the aid of a noise generator an information signal for nontonal speech components
7 is synthesized.

1 12. (Amended) [Method] The method as in claim 10 or 11, [whereby] wherein
2 the information signal (NS) and/or the estimated information signal (NS') is amplified.

1 13. (Amended) Application of the method [per one of the claims 1 to 12]
2 according to claim 1 for operating a hearing aid.

1 14. (Amended) Hearing air operating by the method [per one of the claims 1 to
2 12] according to claim 1.